National Transportation Safety Board Washington, DC 20594

Brief of Accident

Adopted 12/08/1998

DCA96MA079

File No. 1724 09/05/1996 NEWBURGH, NY Aircraft Reg No. N68055 Time (Local): 05:54 EDT Make/Model: McDonnell Douglas / DC-10-10CF Fatal Serious Minor/None Engine Make/Model: GE / CF6-6D Crew 0 5 0 Aircraft Damage: Destroyed Pass 0 0 0 Number of Engines: 3 Operating Certificate(s): Flag Carrier/Domestic Type of Flight Operation: Non-scheduled; Domestic; Cargo Reg. Flight Conducted Under: Part 121: Air Carrier Last Depart. Point: MEMPHIS . TN Condition of Light: Dawn Destination: BOSTON . MA Weather Info Src: Weather Observation Facility Airport Proximity: On Airport Basic Weather: Instrument Conditions Airport Name: NEWBURGH/STEWART INTL Lowest Ceiling: 3000 Ft. AGL, Broken Runway Identification: 27 Visibility: 2.00 SM Runway Length/Width (Ft): 11818 / 150 Wind Dir/Speed: 280 / 004 Kts Runway Surface: Asphalt Temperature (°C): 18 Precip/Obscuration: Runway Surface Condition: Dry

Pilot-in-Command Age: 47

Certificate(s)/Rating(s)

Airline Transport; Commercial; Multi-engine Land; Single-engine Land

Instrument Ratings

Airplane

Flight Time (Hours)

Total All Aircraft: 12344 Last 90 Days: Unk/Nr Total Make/Model: 2504 Total Instrument Time: UnK/Nr

The airplane was at FL 330 when the flightcrew determined that there was smoke in the cabin cargo compartment. An emergency was declared and the flight diverted to Newburgh/Stewart International Airport and landed. The airplane was destroyed by fire after landing. The fire had burned for about 4 hours after after smoke was first detected. Investigation revealed that the deepest and most severe heat and fire damage occurred in and around container 6R, which contained a DNA synthesizer containing flammable liquids. More of 6R's structure was consumed than of any other container, and it was the only container that exhibited severe floor damage. Further, 6R was the only container to exhibit heat damage on its bottom surface, and the area below container 6R showed the most extensive evidence of scorching of the composite flooring material. However, there was insufficient reliable evidence to reach a conclusion as to where the fire originated. The presence of flammable chemicals in the DNA synthesizer was wholly unintended and unknown to the preparer of the package and shipper. The captain did not adequately manage his crew resourses when he failed to call for checklists or to monitor and facilitate accomplishment of required checklist items. The Department of Transportation hazardous materials regulations do not adequately address the need for hazardous materials information on file at a carrier to be quickly retrievable in a format useful to emergency responders.

Brief of Accident (Continued)

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Occurrence #1: FIRE Phase of Operation: CRUISE

Findings

- 1. (C) CARGO/BAGGAGE SMOKE
- 2. (C) CARGO/BAGGAGE FIRE
- 3. (C) CARGO/BAGGAGE UNDETERMINED
- 4. SUPERVISION INADEQUATE PILOT IN COMMAND
- 5. HAZARDOUS MATERIAL
- 6. INFORMATION INSUFFICIENT OTHER GOVERNMENT PERSONNEL

Occurrence #2: FORCED LANDING
Phase of Operation: EMERGENCY LANDING

Findings Legend: (C) = Cause, (F) = Factor

The National Transportation Safety Board determines the probable cause(s) of this accident as follows. an in-flight cargo fire of undetermined origin. (NTSB Report AAR-98/03)